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10/626,650

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Masataka Yamashita

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EXAMINER

PIZIALI, JEFFREY J

ART UNIT

PAPER NUMBER

2629

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/626,650

Applicant(s)

YAMASHITA ET AL.

Examiner

Jeff Piziali

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2006 and 14 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-15 and 17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-15 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed (on 14 November 2006) in this application after final rejection (mailed 17 July 2006). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicants' submission filed on 16 October 2006 has been entered.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

3. The drawings were received on 27 December 2005. These drawings are acceptable.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

Art Unit: 2629

international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 10-15 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by *D'Souza et al* (US 6,862,029 B1).

Regarding claim 10, D'Souza discloses a method of measuring luminance of an image display apparatus [Fig. 1; 10] having a plurality of pixels [Fig. 1; 14], comprising: a first step of causing a plurality of the pixels that are not adjacent each other in a plurality of the pixels arranged in a first direction to emit light in a first period (i.e. red pixels along a horizontal line/row of the CRT/FED-type display's grid/matrix -- wherein horizontally neighboring red pixels will inherently be separated from each other by green and blue pixels spaced along the same horizontal line/row), and causing a plurality of the pixels that are adjacent to the plurality of the pixels emitting light in the first period in the first direction not to emit light in the first period (i.e. green or blue pixels along a horizontal line/row of the CRT/FED-type display's grid/matrix); a first detecting step [Fig. 1; 18] of detecting each of emission statuses of the plurality of the pixels emitting light in said first step by imaging light from the plurality of the pixels emitting in the first period on respective different positions of a sensor device [Fig. 1; 18] in a plane of which optical sensors are arranged (see Column 6, Lines 17-48); a second step of causing a plurality of the pixels that do not emit light in said first step in the plurality of the pixels arranged in the first direction to emit light, and a second detecting step of detecting each of emission statuses of the plurality of the pixels emitting light in said second step (see Column 3, Lines 1-47 -- wherein brightness output is detected/measured one RGB color at a time).

Regarding claim 11, D'Souza discloses said second step includes causing a plurality of the pixels that are not adjacent to each other in a plurality of the pixels not emitting light in said first step, to emit light (see Column 2, Lines 16-31 -- wherein only one RGB color at a time is output).

Regarding claim 12, D'Souza discloses said first detecting step and said second detecting step are executed using at least one measuring apparatus [Fig. 1; 18] for imaging emission statuses of a plurality of the pixels, to detect a two dimensional image [Fig. 1; 12] (see Column 3, Lines 12-23).

Regarding claim 13, D'Souza discloses said first step, said first detecting step, said second step and said second detecting step are executed by matching a part of a display area [Fig. 2; 210] of said image display apparatus and a measurement area [Fig. 2; 208] of said at least one measuring apparatus, and then said first step, said first detecting step, said second step and said second detecting step are executed by matching another part of the display area of said image display apparatus and the measurement area of said at least one measuring apparatus (see Column 6, Lines 17-48 -- wherein using plural display patterns and plural photometers is disclosed).

Regarding claim 14, D'Souza discloses the at least one measuring apparatus includes a plurality of measuring apparatuses disposed on the image display apparatus, and luminances of

Art Unit: 2629

the pixels are simultaneously measured by the measuring apparatuses (see Column 6, Lines 17-48 -- wherein using plural photometers simultaneously is disclosed).

Regarding claim 15, this claim is rejected by the reasoning applied in rejecting claim 10; furthermore, D'Souza discloses a method of manufacturing a display (see Fig. 2; Column 6, Lines 1-11) comprising: an adjustment step of adjusting characteristics (via transfer function calculations) of the pixels based on a result obtained in said first detecting step and said second detecting step (see Column 5, Lines 31-38).

Regarding claim 17, this claim is rejected by the reasoning applied in rejecting claims 10 and 15; furthermore, D'Souza discloses the image display apparatus has a plurality of electron-emitting devices and fluorescent member emitting light by being irradiated by electrons emitted from the electron-emitting devices (see Column 3, Lines 1-11 -- wherein the display may be, among other things, a CRT or FED type display device).

Response to Arguments

6. Applicants' arguments filed 16 October 2006 have been fully considered but they are not persuasive. The applicants contend, "*D' Souza et al. is not seen to disclose or suggest measuring luminance using a sensor device in a plane of which optical sensors are arranged, let alone imaging light from a plurality of non-adjacent pixels emitting light on respective different positions of a sensor device in a plane of which optical sensors are arranged*" (see Page 8,

Art Unit: 2629

Paragraph 2 of the 'Amendment After Final' filed 16 October 2006). However, the examiner respectfully disagrees.

D'Souza explains, "*The resulting pattern 212 displayed on the monitor screen 210 could be a red dot or square comprising a plurality of pixel locations. As the voltage input controlling the pattern is incrementally changed from V_{min} to V_{max} or vice versa, the brightness of the resulting pattern 212 is measured incrementally by the photometer 208. It is understood that the pattern 212 need only be a pattern large enough to be discerned and focused on by the photometer. The patterns shape is not substantially significant. Furthermore, **the pattern could be positioned at one or various locations on the screen 210...** It is further understood that the colors do not have to be limited to the red, green, and blue, but could be **combinations of each or whatever the basic colors that are combined to create other colors are for the specific CDD.** It is further understood that **more than one color** can be displayed on the screen 210 and be recorded by a **plurality of photometers at the same time**" (see Column 6, Lines 22-48).*

Therefore, D'Souza does indeed teach detecting each of emission statuses of the plurality of the pixels (i.e. red and blue pixel patterns positioned at various locations on the screen, for instance) emitting light in the first step by imaging light from the plurality of the pixels emitting in the first period (wherein, during which such red/blue emission periods, green pixels would not emit light) on respective different positions (i.e. "various locations on the screen") of a sensor device [Fig. 1; 18] in a plane of which optical sensors (i.e. "a plurality of photometers") are arranged, as instantly claimed.

By such reasoning rejection of the claims is deemed necessary, proper and thereby maintained at this time.

Art Unit: 2629

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Piziali whose telephone number is (571) 272-7678. The examiner can normally be reached on Monday - Friday (6:30AM - 3PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (571) 272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jeff Piziali
2 February 2007